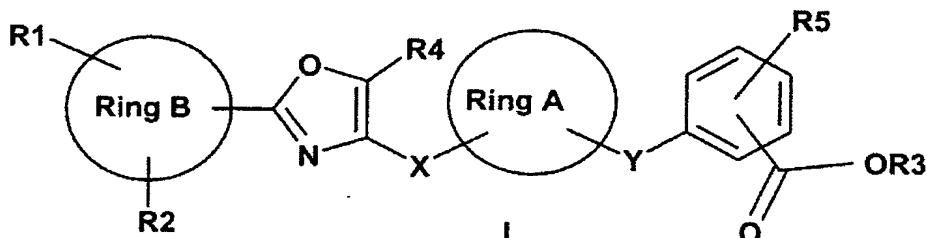


We claim:

DEAV2003/0017

Dr. WI

1. A compound of the formula I



5

wherein

10 Ring A is (C_3-C_8) -cycloalkanediyl or (C_3-C_8) -cycloalkenediyl, wherein one or more carbon atoms in said (C_3-C_8) -cycloalkanediyl and (C_3-C_8) -cycloalkenediyl groups is optionally replaced by oxygen atoms;

15 Ring B is a) phenyl; or
b) (C_3-C_8) -cycloalkyl, an 8-, 9-, 10-, 11-, 12-, 13- or 14-membered aromatic ring, or a 5-, 6-, 7-, 8-, 9-, 10-, 11- or 12-membered heteroaromatic ring optionally containing one, two, three or four heteroatoms selected from the group consisting of N, O and S;

20 R1 is a) in the case where ring B is selected from a) above:
 SCF_3 , OCF_2-CHF_2 , O-phenyl or O- (C_1-C_6) -alkyl-O- (C_1-C_3) -alkyl;
b) in the case where ring B is selected from b) above:
H, F, Cl, Br, OH, NO_2 , CF_3 , OCF_3 , OCF_2-CF_3 , SCF_3 , OCF_2-CHF_2 , O-phenyl, (C_1-C_6) -alkyl, O- (C_1-C_6) -alkyl or O- (C_1-C_6) -alkyl-O- (C_1-C_3) -alkyl;

25 c) in the case ring B is selected from a) above and R4 is phenyl:
 (C_1-C_6) -alkyl or O- (C_1-C_6) -alkyl;

30 R2 is H or CF_3 ;

10 R4 is a) in the case where ring B is selected from a) above:
phenyl;

15 5 b) in the case where ring B is selected from b) above:
H, F, Cl, Br, OH, NO₂, CF₃, OCF₃, (C₁-C₆)-alkyl or O-(C₁-C₆)-alkyl;

20 c) in the case ring B is selected from a) above and R1 is
selected from a) above:
(C₁-C₆)-alkyl;

25 R5 is H, F, Cl, Br, OH, NO₂, CF₃, OCF₃, (C₁-C₆)-alkyl or O-(C₁-C₆)-alkyl;

30 R3 is H or (C₁-C₆)-alkyl;

35 15 X is (C₁-C₆)-alkanediyl, wherein one or more carbon atoms in said (C₁-C₆)-alkanediyl group are optionally replaced by oxygen atoms;

40 Y is (C₁-C₆)-alkanediyl, wherein one or more carbon atoms in said (C₁-C₆)-alkanediyl group are optionally replaced by oxygen atoms;

20 and pharmaceutically acceptable salts thereof.

25 2. The compound of Claim 1 wherein:

30 Ring A is (C₃-C₈)-cycloalkanediyl or (C₃-C₈)-cycloalkenediyl, wherein one or
more carbon atoms in said (C₃-C₈)-cycloalkanediyl and (C₃-C₈)-
cycloalkenediyl groups are optionally replaced by oxygen atoms;

35 35 Ring B is a) phenyl; or
b) (C₃-C₈)-cycloalkyl, an 8-, 9-, 10, 11-, 12-, 13- or 14-membered
aromatic ring, or a 5-, 6-, 7-, 8-, 9-, 10-, 11- or 12-membered
heteroaromatic ring optionally containing one, two, three or four
heteroatoms selected from the group consisting of N, O and S;

40 R1 is a) in the case where ring B is selected from a) above:
SCF₃, OCF₂-CHF₂, O-phenyl or O-(C₁-C₆)-alkyl-O-(C₁-C₃)-alkyl;

40 b) in the case where ring B is selected from b) above:

H, F, Cl, Br, OH, NO₂, CF₃, OCF₃, OCF₂-CF₃, SCF₃, OCF₂-CHF₂, O-phenyl, (C₁-C₆)-alkyl, O-(C₁-C₆)-alkyl or O-(C₁-C₆)-alkyl-O-(C₁-C₃)-alkyl;

5 c) in the case where ring B is selected from a) above and R4 is phenyl:
 (C₁-C₆)-alkyl or O-(C₁-C₆)-alkyl;

10 R is H or CF₃;

15 R4 is a) in the case where ring B is selected from a) above:
 phenyl;

15 b) in the case where ring B is selected from b) above:
 H, F, Cl, Br, OH, NO₂, CF₃, OCF₃, (C₁-C₆)-alkyl or O-(C₁-C₆)-alkyl;

20 c) in the case where ring B is selected from a) above and R1 is selected from a) above:
 (C₁-C₆)-alkyl;

20 R5 is H, F, Cl, Br, OH, NO₂, CF₃, OCF₃, (C₁-C₆)-alkyl or O-(C₁-C₆)-alkyl;

25 R3 is H or (C₁-C₆)-alkyl;

25 X is CH₂-O;

25 Y is (C₁-C₆)-alkanediyl, wherein one or more carbon atoms in said (C₁-C₆)-alkanediyl group are optionally replaced by oxygen atoms.

30 3. The compound of Claim 2 wherein:

35 Ring A is (C₃-C₈)-cycloalkanediyl wherein one carbon atom therein is optionally replaced by an oxygen atom;

35 Ring B is a) phenyl; or

40 b) (C₃-C₈)-cycloalkyl, an 8-, 9-, 10-, 11-, 12-, 13- or 14-membered aromatic ring, or a 5-, 6-, 7-, 8-, 9-, 10-, 11- or 12-membered heteroaromatic ring optionally containing one, two, three or four heteroatoms selected from the group consisting of N, O and

S;

R1 is a) in the case where ring B is selected from a) above:
 SCF_3 , $\text{OCF}_2\text{-CHF}_2$, O-phenyl or O-($\text{C}_1\text{-C}_6$)-alkyl-O-($\text{C}_1\text{-C}_3$)-alkyl

5 b) in the case where ring B is selected from b) above:
H, F, Cl, Br, OH, NO₂, CF₃, OCF₃, OCF₂-CF₃, SCF₃, OCF₂-CHF₂,
O-phenyl, (C₁-C₆)-alkyl, O-(C₁-C₆)-alkyl or O-(C₁-C₆)-alkyl-O-(C₁-C₃)-
alkyl;

10 c) in the case where ring B is selected from a) above and R4 is phenyl:
(C₁-C₆)-alkyl or O-(C₁-C₆)-alkyl;

15 R2 is H or CF_3 ;

R4 is a) in the case where ring B is selected from a) above:
phenyl;

20 b) in the case where ring B is selected from b) above:
H, F, Cl, Br, OH, NO₂, CF₃, OCF₃, (C₁-C₆)-alkyl or O-(C₁-C₆)-alkyl

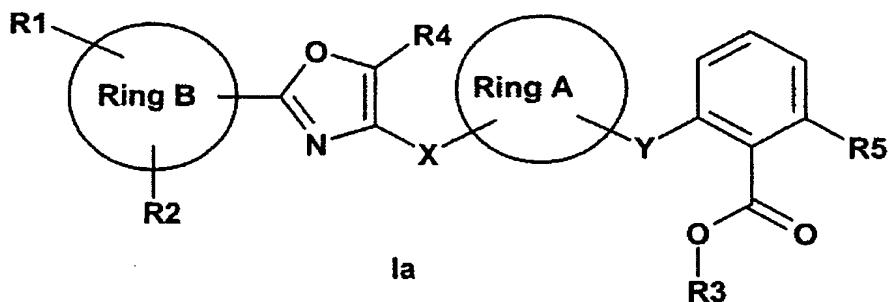
R5 is H, F, Cl, Br, OH, NO₂, CF₃, OCF₃, (C₁-C₆)-alkyl or O-(C₁-C₆)-alkyl;

R3 is H or (C₁-C₆)-alkyl;

30 X is $\text{CH}_2\text{-O-}$

Y is $\text{CH}_2\text{-O}$.

35 4. The compound of Claim 1 which has the formula Ia



wherein ring A, ring B, R1, R2, R3, R4, R5, X and Y are as defined in Claim 1.

5 5. The compound of Claim 4 wherein:

R3 is H; and

R5 is methyl.

10 6. The compound of Claim 5 wherein:

Ring A is (C₅-C₇)-cycloalkanediyl;

15 Ring B is a) phenyl; or

b) (C₃-C₈)-cycloalkyl, an 8-, 9-, 10-, 11-, 12-, 13- or 14-membered aromatic ring, or a 5-, 6-, 7-, 8-, 9-, 10-, 11- or 12-membered heteroaromatic ring optionally containing one, two, three or four heteroatoms selected from the group consisting of N, O and S;

20 R1 is a) in the case where ring B is selected from a) above:
SCF₃, OCF₂-CHF₂, O-phenyl or O-(C₁-C₆)-alkyl-O-(C₁-C₃)-alkyl;

b) in the case where ring B is selected from b) above:
H, F, Cl, Br, OH, NO₂, CF₃, OCF₃, OCF₂-CF₃, SCF₃, OCF₂-CHF₂, O-phenyl, (C₁-C₆)-alkyl, O-(C₁-C₆)-alkyl or O-(C₁-C₆)-alkyl-O-(C₁-C₃)-alkyl;

25 30 c) in the case where ring B is selected from a) above and R4 is phenyl:

(C₁-C₆)-alkyl or O-(C₁-C₆)-alkyl;

R2 is H or CF₃;

5 R4 is a) in the case where ring B is selected from a) above:
phenyl;

b) in the case where ring B is selected from b) above:
H, F, Cl, Br, OH, NO₂, CF₃, OCF₃, (C₁-C₆)-alkyl or O-(C₁-C₆)-alkyl;

10 c) in the case where ring B is selected from a) above and R1
selected from a) above:
(C₁-C₆)-alkyl;

15 R5 is methyl;

R3 is H;

X is CH₂-O;

20 Y is CH₂-O.

7. The compound of Claim 6 wherein the central cycloalkanediyl ring is attached 1,3-cis.

25 8. A pharmaceutical composition comprising a pharmaceutically acceptable carrier and one or more compounds of Claim 1.

9. The pharmaceutical composition of Claim 6 further comprising at least one
30 additional active ingredient.

10. The pharmaceutical composition of Claim 9 wherein said additional active ingredient has favorable effects on metabolic disturbances or disorders.

35 11. The pharmaceutical composition of Claim 9 wherein said additional active ingredient is an antidiabetic.

12. The pharmaceutical composition of Claim 9 wherein said additional active ingredient is a lipid modulator.

13. A method of treating disorders of fatty acid metabolism and glucose utilization comprising administering to a patient in need thereof a therapeutically effective amount of a compound of Claim 1.

14. A method of treating disorders of insulin resistance comprising administering to a patient in need thereof a therapeutically effective amount of a compound of Claim 1.

15. A method of treating diabetes mellitus including the prevention of the sequelae associated therewith comprising administering to a patient in need thereof a therapeutically effective amount of a compound of Claim 1.

16. A method of treating dyslipidemia and sequelae associated therewith comprising administering to a patient in need thereof a therapeutically effective amount of a compound of Claim 1.

20 17. A method of treating metabolic syndrome and conditions associated therewith comprising administering to a patient in need thereof a therapeutically effective amount of a compound of Claim 1.

25 18. A method of treating disorders of fatty acid metabolism and glucose utilization comprising administering to a patient in need thereof a therapeutically effective amount of a compound of Claim 1 in combination with at least one further active compound.

30 19. A method of treating disorders of insulin resistance comprising administering to a patient in need thereof a therapeutically effective amount of a compound of Claim 1 in combination with at least one further active compound.